#### Save Copper in Quincy Sands Edison's Task.

The marvelous genius of Thomas A. Edison and the highest efficiency of United States and Europe will be brought into operation for the purpose in hundreds of thousands of tons at trating plants in the Lake Superior copper mining district.

For a great number of years it has been realized that the waste stamp sands about Lake Superior copper stamps mills contained mines of value. Numerous assays showed that the earlier day methods of concentrating and the unusual richness of the rock mined in the earlier days of local minabout a condition which permitted upusual copper values to escape when the rock was put through the mills.

Hecla corporation started regrinding operations resulting from experiments covering a period of years in their mills. These experiments were at first looked upon with askance by other mill men. When the Calumet & Hecla consolidation scheme was evidence was proposed and introduced on the one side showing the actual profits the Calumet interests had secured from the treatment of mill their plans and purposes to erect is a possibility of a big milling propother plants to re-treat the sands on their immense dumps.

Since that time, there has been ample proof of the correctness of the Calumet & Hecla position as to values and as to the practical workings success of their regrinding plan. The annual reports of the Calumet & Hecla company show that the total of savings and net earnings for the treasury of this company from the is changing. It was not expected that charge. handling of mill tailings runs into millions to date, on the first plant in operation.

The second plant will be ready for operation in the near future. It will handle, in the main, stamp sand from the old discard and there is every reason to believe that it will result in savings that will astonish all interests, for in the old days comparatively little attention was made to mill savings as the copper rock itself was so rich that a 60 or 70 pound recovery from the mill was below the average.

But the Calumet & Hecla operations in search of values on the sand dump is not the only work of this kind that has been done here. The Quincy com pany, has, at different times, optioned its sands on a royalty basis and extensive experiments have been

Now, however, the Edison interests are going to make a complete and thorough investigation of the commercial possibilities of these same Quincy sands. They have secured from the officials of the Quincy an option on the dump, on the same The Essentials of royalty basis and are preparing to conduct a series of elaborate experiments by which the best electrical methods will be applied to the separation of the copper from the sand.

There is no doubt as to the copper values in these sands. Assays easily prove that. The whole problem is one of securing a mechanism which will treat these sands at a profit. There have been numerous electrical experiments on Quincy and on Calumet & Hecla sands. None of these have proven successful to date. Right now the Calumet & Hecla sands are being treated by an electrical process in operation in the Butte district, a large shipment having been made for that purpose.

But this is the first time the great mind of Thomas A. Edison has been turned to this district and to the commercial possibilities contained therein. It is understood that some of Edison's most capable men have been at work on this problem for some time these, for there are other require-past and that the great wizard kimself ments fully as important as learning. is contemplating a visit to this dis-trict when the work is properly under way. Operations on the Quincy sands will commence within a few weeks. Homer A. Guck.

# Jarbridge, Nevada Mines.

Jarbridge, Nev., June 13, 1913. On the Wasp group, at the head of the Jarbridge river, owned by Olaf the electric engineering staffs of the Norman, Wm. Martin and Wm. Rowland, some very rich ore has been found in surface prospecting. The vein of profitably extracting copper from crops at different places for over 800 the stamp sands that are to be found feet and not only the vein matter itself pans well, but also the surface dirt the outlets of various copper concen- alongside. In drifting on the vein some fine specimen ore was encountered and it carries a greater percentage of silver than the other ores of this section. A tunnel is now being driven to crosscut the vein under the place where the richest ore was found. J. T. McCormick, who with Wm. Corbridge owns a group of nine claims at Bearpaw mountain, twelve miles west of town, has returned from a vising development combined to bring it to the property. He was accompanied on the trip by George Winkler and A. T. McCauley. The vein is 50 or 60 feet wide on the surface-at A few years ago the Calumet & least vein matter is found over that area, and it has been traced and pros pected for 1500 feet in length. In all of the numerous pannings which were made from various portions of the vein by different members of the party, there was not a single "skunk"-all showed one or more colors of gold. proposed and contested in the court | Many of the colors are coarse and Mr. Corbridge has a small nugget, the size of several pinheads, that he got from a panning. Not much development has been done as yet, but with tailings in a recrushing plant and the values so widely distributed there

> osition. Under the supervision of Dick Swanson, formerly of Boulder county, Colo., the Enterprise tunnel is making good headway, when the size of the bore is considered. It is 7x9 feet in the clear and is now in 240 feet. Up to the present it has gone through the regular country rock for this section, but in the last day or two the formation a vein would be cut so soon in this tunnel but as many of the veins in the Jarbridge district do not crop to the surface, it is among the possibilities.

> John A. Jess, superintendent for H Palmer of Chicago, has secured a permit from the state mining inspector for the installation of a hoist over the shaft of the Alphas, and from this fact it is presumed that work on that property will be resumed soon. It is stated that sinking the shaft to great er depth will be the first work contemplated.

> The vein on the Buckeye was struck the first of the week in the lower crosscut tunnel, which opens it at a vertical depth of about 160 feet. Where struck the vein is 21/2 feet wide and the values, as shown by pannings, inclined to be small, but as it is being drifted on the gray quartz is coming in which, in the upper level, and the increase of ore values.

JAMES F. O'BRIEN.

# Professional Success.

Attention at this season of the year is naturally turned to the hundreds of young men who are being sent out as engineers by the universities, the colleges and the technical schools. These young men have been prepared. as best they can, to occupy positions of responsibility in the industrial or engineering world for the few years allotted them. The life work for which they have been preparing is an important one whatever field of industry it may be in, for the engineers -civil, mechanical, mining and others -are building and keeping in repair the foundation on which is built our prosperity.

The mining engineer, who is all kinds of an engineer in one, must possess certain essentials to attain the highest success in his profession. Schools and colleges do not supply all part of which lies with the young man himself, and part of which must be cold, and heal the inflamed memgained by actual contact with prac- branes. The genuine in a yellow tical work. Experience is often a package. H. H. Watkins, Druggist.

dear teacher and those who are wise enough to profit by the experiences of others, can often save themselves much painful and discouraging labor.

John Hays Hammond, in an address delivered before a graduating class of a western mining school several years ago, outlined the essentials of professional success as follows: "First, and above all other considerations, I would place the possession of character. An honest, clean-cut, straightforward, conscientious young fellow, ambitious, persevering; and last, but by no means least, level-headed, would in my judgment possess fully 75 per cent of the essentials of success, while in relative importance I would not attach more than 25 per cent to the possession of a technical education. And I say this without in any degree depreciating the inestimable value of a technical education."-Mining and Engineering World.

#### To Work Harqua Hala.

A Prescott dispatch says:-Ample capital has been provided for the development of the property of the Yuma-Warrior Mining company, which is better known as the old Harqua Hala mine. In the early days was one of the most important gold producers of the west, monthly ship ments of bullion running as high as 200,000\$. The property has a record of 5,000,000\$ in dividends, and much gold was taken out by thieves.

Much rich ore has been developed in the Harqua Hala since it dropped out of the list of producers. The present company has erected a plant on the property. It is now stated that the plant will be in operation within sixty days.

Operations are to be resumed on the Midnight Test mine, in the Groom Creek district. Col K. D. Chase, one of the principal owners, is coming from Fairbault, Minnesota, to take

The Midnight Test has a main working shaft 400 feet in depth and sauch good ore has been blocked out. A ten stamp mill, hoisting plant and other appliances are on the ground with accomodations for a large nnmber of miners.

Owing to warm weather, operations at several properties in the Tiptop district have been suspended for the summer. The principal camp is that maintained by the Inspiration Mining company, which is keeping a tenstamp mill running steadily. A new plant of the same capacity is being in-

The payroll of the British Columbia Copper Company, at Voigt and Sunset camps, which aggregates several thoued at once by the employment of double the number of men. according preceded the widening out of the vein to a report from Princeton, B. C. Satisfied with the results of its investigation with diamond drills the company will extend the area of these explorations and may also open the property for response by tunnels and shafts. It is understood that but a fractional part of the area bonded has been investigated, but that these investigations disclosed the presence of ore bodies up to 200 feet wide continuing in depth to, and apparently beyoud, the extremity of drilling which was upward of 600 feet. The values in copper and gold are low but it is calculated that a small profit per ton will be made on the copper and that the gold extraction will be net .- New York Mining Age.

# The Brilliant Stars of June

By the end of June, Mars, Venus, Saturn and Jupiter will all be morning stars, but Foley's Honey and Tar Compound is at all times the "Star" medicine for coughs, colds, croup and whooping cough. A cold in June is as apt to develop into bronchitis or pneumonia as at any other time, but not if Foley's Honey and Tar Compound is taken. It will surely head off the

#### Mine Company Has its Own Inspector.

A Clifton dispatch says:-On the theory that direct instruction and advice by a man on the ground, familiar with all underground workings, is the best safeguard against accidents, the the position of local inspector at its mines and works. The position is being filled by Frank Farmer, formerly connected with the mining bureau of the interior department and later in charge of several Mexican proper-

Already Mr. Farmer has familiarized himself with the underground shipments will be sent, but they will workings of the company's mines at Morenci, Metcalf and Coronado, and he is collecting a mass of statistical in fair condition at present, but will data which, after years of observation and comparison, will determine the gravel at the company's expense. factors that tend toward increasing or decreasing the number of accidents. All accidents are carefully and the property will at once go to depth thoroughly investigated by him and in order to develop ore bodies located he has made numerous valuable sug- by diamond drill holes on the lower gestions to Superintendent Norman levels. The deepest drill hole was Carmichael.

Mr. Farmer's instructions are to cothe state mine inspector and his deputies. He is thoroughly familiar with the state mine inspection law.

Recently the Arizona Copper company purchased apparatus for recuing men who are overcome by gas or smoke. Other mining companies in southern Arizona have recently taken steps looking toward additional safety for their underground workers. In some places safety committees have been appointed and regular meetings are held for the discussion and adoption of rules governing underground work. - Phoenix Gazette.

## Take Plenty of Time to Eat.

There is a saying that "rapid eating is slow suicide." It you have formed the habit of eating too rapidly you are most likely suffering from indigestion or constipation, which will result eventually in serious illness unless corrected. Digestion begins in the mouth. Food should be thoroughly masticated and insalivated. Then when you have a fullness of the stomach or feel dull and stupid after eating, take one of Chamberlain's Tablets. Many severe cases of stomach trouble and constipation have been cured by the use of these tablets. They are easy to take and most agreeable in effect. Sold by all dealers.

### Mascot Copper Co. Will Soon Ship Ore.

The Mascot Copper company, located three miles from Dos Cabezas and about 17 miles east of Willcox, the nearest railroad point, will begin shipping shortly, according to B. G. Hines, Arizona Copper company has created until recently master mechanic of the property.

Ore bunkers are being located at Willeox from which to load railroad cars. The company has decided to install a line of motor trucks to haul its ore from the property and supplies from the railroad to the mine. It has not yet been announced where the probably be sent to Douglas. The road between the mine and Willcox is later be graded and surfaced with

A large steam hoist, capable of sinking 1000 feet, has been installed and 1500 feet, which resulted in finding a good body of ore. Two drills are now operate in every way possible with in use in the exploration work. About 100 men are now employed.-Tucson Citizen.

#### Employ Many Men at Four Metals Mine.

Great activity is being shown at the Four Metals mine, located about sixteen miles from Patagonia. Upward of 150 men are now employed at this property, and construction work is being rushed at a pace that suggests that big capital is behind this concern.

A concentrator is not only one of the proposed additions to the camp, but is an assurred fact. Other buildings proposed and said to be soon erected, are a modern hospital and library.

O. A. Turner, the manager of this property, is a man of much experience in mines and mining in the southwest. Fred Miller, the superintendent, is also well up in the mining business.-Tucson Citizen.

# Shake off Your Rheumatism.

Now is the time to get rid of your rheumatism. Try a twenty five cent bottle of Chamberlain's Liniment and see how quickly your rneumatic pains disappear. Sold by all dealers.

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